APR/FY06

JOLIET ARMY AMMUNITION PLANT Illinois

Army Defense Environmental Restoration Program Installation Action Plan

Table of Contents

Table of Contents	1
Statement of Purpose	3
Acronyms	4
Installation Information	6
Cleanup Program Summary	
Transfer Summary	
Transfer Summary	9
IRP Program	11
Summary	
Contamination Assessment	14
IRP Active Sites	19
JAAP-001, Southern Ash Pile	20
JAAP-002, Explosive Burning Grounds	21
JAAP-003, Flashing Grounds	22
JAAP-004, Lead Azide Area	23
JAAP-009, Northern Ash Pile	24
JAAP-011, M11 Landfill	
JAAP-012, Sellite Manufacturing Area	26
JAAP-013, M13 Gravel / Excavation Pits	27
JAAP-0L1, Group 61 TNT - Ridge & Furrow System	28
JAAP-0L2, Explosive Burning Ground	29
JAAP-0L3, Demolition Area	30
JAAP-0L4, Landfill Area	31
JAAP-0L5, Salvage Yard	32
JAAP-0L7, Group 1, JAAP-0L8, Group 2, JAAP-L10, Group 3A	33
JAAP-OL9, Group 3	34
JAAP-L14, Group 4	35
JAAP-L23, Group 27	
JAAP-GWM, Installation-Wide Groundwater Monitoring	37
PBC at Joliet	
IRP No Further Action Sites Summary	39
IRP Schedule	40
IRP Costs	
IRF Costs	42
Military Munitions Response Program	43
Summary	44
Contamination Assessment	45
MMRP Active Sites	47
JAAP-001-R-01, Demolition Area (L3)	48
JAAP-002-R-01, Explosive Burning Ground 1 (L2)	
JAAP-004-R-01, Former Burning Area (L34)	

Table of Contents

MMRP No Further Action Sites Summary	51
MMRP Schedule	52
MMRP Costs	53
Community Involvement	54

Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the US Army Environmental Center (USAEC), Joliet AAP (JOAAP), executing agencies, regulatory agencies and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this Installation Action Plan during a planning workshop held on 25 Apr 06:

Company/Installation/Branch

Engineering & Environment, Inc. for USAEC Illinois Environmental Protection Agency JOAAP MKM Engineers, Inc MWH USACE USAEC USEPA

Acronyms & Abbreviations

AAP Army Ammunition Plant

ACSIM Assistant Chief of Staff for Installation Management AEDB-CC Army Environmental Database – Compliance Clean-up

AEDB-R Army Environmental Database – Restoration AMCCOM Army Munitions and Chemical Command

BRAC Base Realignment and Closure

CC Compliance Clean-up

CERCLA Comprehensive Environmental Response Compensation and Liability Act

(1980)

COE Corps of Engineers CTC Cost-to-Complete

cy cubic yards
D&M Dames & Moore

DERA Defense Environmental Restoration Account

DERP Defense Environmental Restoration Program (now called ER,A)

DMM Discarded Military Munitions

DNT Dinitrotoluene

DoD Department of Defense

EPA (United States) Environmental Protection Agency

ER,A Environmental Restoration, Army (formally called DERA)

FS Feasibility Study FY Fiscal Year

GMZ Groundwater Management Zone

GW Groundwater

HRR Historical Record Review HRS Hazard Ranking System

HTRW Hazardous, Toxic and Radiological Waste

IAG Interagency Agreement IAP Installation Action Plan

IL Illinois

IRA Interim Remedial Action

JAAP Joliet Army Ammunition Plant JOAAP Joliet Army Ammunition Plant

LAP Load and Pack

LTM Long-term Management LTO Long-term Operation MC Munitions Constituents

MEC Munitions and Explosives of Concern MMRP Military Munitions Response Program

Mfg Manufacturing

NCP National Contingency Plan

NA Not Applicable NE Not Evaluated

NPL National Priorities List
PA Preliminary Assessment
PBC Performance Based Contract

Acronyms & Abbreviations

PCB Polychlorinated Biphenyls

RA Remedial Action

RA(C) Remedial Action - Construction RA(O) Remedial Action - Operation RAB Restoration Advisory Board

RC Response Complete

RCRA Resource Conservation and Recovery Act

RD Remedial Design

RDX Royal Demolition Explosive

REM Removal

RI Remedial Investigation RIP Remedy in Place ROD Record of Decision

RRSE Relative Risk Site Evaluation S&A Supervision and Administration

SI Site Inspection

SRU Soil Remediation Unit

SVOC Semi-Volatile Organic Compounds Tetryl Trinitrophenylmethylnitramine

TNT Trinitrotoluene

TPH Total Petroleum Hydrocarbons
TRC Technical Review Committee

USACHPPM United States Army Center for Health Promotion and Preventive Medicine

USAEC United States Army Environmental Center USDA United States Department of Agriculture

UST Underground Storage Tank VOC Volatile Organic Compounds

WCLF Will County Landfill

Installation Information

Installation Locale: Joliet Army Ammunition Plant (JOAAP) is located in northeastern Illinois, approximately 60 miles southwest of Chicago and 10 miles south of Joliet in Will County. Nearby communities include Channahon to the northwest, Elwood to the north, Manhattan to the northeast, Symerton to the southeast, and Wilmington to the south. The installation, which is divided by IL Route 53, occupied a total of 23,544 acres, approx. 37 square miles. Current acreage under Department of Army control is approximately 1,753.

Installation Mission: JOAAP was constructed in the early 1940s. It originally consisted of the Kankakee Ordnance Works and the Elwood Ordnance Plant and is located in southwestern Will County, Illinois. The installation originally encompassed approximately 36,000 acres that are divided by IL Route 53. Approximately 13,000 acres were excessed and disposed in the early 1960s. The eastern side of the plant was used to load, assemble and pack bombs, shells, mines, and supplementary charges, and was known as the LAP Area. The western side of the plant, known as the Mfg Area, was equipped to produce explosives such as trinitrotoluene (TNT), dinitrotoluene (DNT), trinitrophenylmethylnitramine (tetryl) and constituent chemicals. In the past, production output at JOAAP varied as the demand for munitions fluctuated. The plant was used extensively during World War II. Production was re-activated in support of the conflicts in Korea and Vietnam. No production has occurred since 1977. During times of inactivity, many areas and facilities were leased out for commercial operations.

Lead Organization:

Base Realignment and Closure Division (BRAC-D)

Lead Executing Agencies:

Investigation Phase - USAEC Remedial Action Phase - USACE, Louisville District

Regulatory Participation

Federal: U.S. Environmental Protection Agency, Region V

State: Illinois Environmental Protection Agency

National Priorities List (NPL) Status: NPL Effective Date: Manufacturing Area July

1987 HRS: 32.08, LAP area March 1989 HRS: 35.23

IAG Effective Date: June 1989

Projected Dates for Construction Completion: 2007

Projected Date for NPL Removal: Unknown

Installation Information

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status: The JOAAP Restoration Advisory Board (RAB) was established in December 1995. It continues to meet every other month.

Installation Program Summaries IRP

Primary Contaminants of Concern: Explosives, Metals

Affected Media of Concern: Soil, Groundwater

Estimated Date for Response Complete (RC): 2007

Funding to date (up to FY05): \$100,997,900 Current year funding (FY06): \$9,764.930 Cost-to-Complete (FY07+): \$12,802,000

MMRP

Primary Contaminants of Concern: MEC, MC

Affected Media of Concern: Soil Estimated Date for RC: 2007

Funding to date (up to FY05): \$472,520 Current year funding (FY06): \$738,000

Cost-to-Complete (2007+): \$0

BRAC

Joliet is a non-BRAC Excess site. There are no BRAC sites at Joliet AAP.

Cleanup Program Summary

Installation Historic Activity

JOAAP was constructed in the early 1940s. It originally consisted of the Kankakee Ordnance Works and the Elwood Ordnance Plant and is located in southwestern Will County, Illinois. The installation originally encompassed approximately 36,000 acres that are divided by IL Route 53. Approximately 13,000 acres were excessed and disposed in the early 1960s. The eastern side of the plant was used to load, assemble and package (LAP) bombs, shells, mines, and supplementary charges, and was known as the LAP Area. The western side of the plant, known as the Mfg Area, was equipped to produce explosives such as trinitrotoluene (TNT), dinitrotoluene (DNT), trinitrophenylmethylnitramine (tetryl) and constituent chemicals. In the past, production output at JOAAP varied as the demand for munitions fluctuated. The plant was used extensively during World War II. Production was re-activated in support of the conflicts in Korea and Vietnam. No production has occurred since 1977. During times of inactivity, many areas and facilities were leased out for commercial operations.

Property Transfer: In accordance with the Illinois Land Conservation Act of 1995, P.L. 104-106, Div. B, Title 2901-2932, Feb 10, 1996, the Army will transfer JOAAP land to various Federal, local and state jurisdictions. Approximately 982 acres was transferred to the Department of Veterans Affairs (VA) to establish a Veterans Cemetery (1997); 455 acres was transferred to Will County, Illinois to establish the Will County Landfill (WCLF) (2002). Approximately 19,100 acres will be transferred to the U.S. Department of Agriculture (USDA) for establishing the Midewin National Tallgrass Prairie. To date, 17,620 acres have been conveyed to USDA. Approximately 3,000 acres will be transferred to the State of Illinois to establish two industrial parks. To date, transference of 2,935 acres to the State of Illinois has been completed.

A total of 22,082 acres (approx. 94%) have been disposed.

JOAAP is an U.S. Army-owned industrial facility that is currently excess. The JOAAP is completely inactive.

IRP

- Prior Year Progress: As of the date of this report, all study has been completed and RODs are finalized. Remedial Actions began in 1999. Completed remedial action at JAAP-006. Begin remedial action at future USDA lands. Initiate PBC for landfills and groundwater
- Future Plan of Action: 12 sites remain to be completed and transferred.

MMRP

- Prior Year Progress: Site Investigation (SI) phase completed.
- Future Plan of Action: Remediation of 3 sites prior to transfer

Transfer Summary

Total Installation Acres: 1,753

Parcel Name: JADA 6
Parcel Size: 235 Acres

Associated Sites: JAAP-006, JAAP-007, JAAP-GWM, PBC AT JOLIET

Transfer Date: 2006 Land Use: Industrial Park

Leases/Permits/Licenses: None

Transfer Strategy: Public Benefit Conveyance

Recipient: State of Illinois (Joliet Arsenal Development Authority (JADA))

Other Issues Affecting Transfer: None

Parcel Name: JADA 8 Parcel Size: 19 acres

Associated Sites: JAAP-009 and JAAP-013

Planned Transfer Date: 200809 Current Land Use: Industrial Park Future Land Use: Industrial Park Leases/Permits/Licenses: None

Transfer Strategy: Transfer outside of Federal Government

Recipient: State of Illinois (Joliet Arsenal Development Authority (JADA)) **Other Issues Affecting Transfer:** Sites require remediation prior to transfer.

Parcel Name: USDA 6 Parcel Size: 580 acres

Associated Sites: JAAP-0L1, JAAP-0L7, JAAP-0L8, JAAP-L10, JAAP-L14

Planned Transfer Date: 200609 Current Land Use: Ammunition Plant Future Land Use: Tallgrass Prairie Leases/Permits/Licenses: None

Transfer Strategy: Transfer to another Federal Agency

Recipient: USDA Forest Service

Other Issues Affecting Transfer: Sites require remediation prior to transfer.

Parcel Name: USDA 7
Parcel Size: 304 acres

Associated Sites: JAAP-002, JAAP-003, JAAP-012, JAAP-0L4, JAAP-0L5, JAAP-0L9,

JAAP-GWM, JAAP-L23

Planned Transfer Date: 200709 Current Land Use: Ammunition Plant Future Land Use: Tallgrass Prairie Leases/Permits/Licenses: None

Transfer Strategy: Transfer to another Federal Agency

Recipient: USDA Forest Service

Other Issues Affecting Transfer: Sites require remediation prior to transfer.

Transfer Summary

Parcel Name: USDA 8
Parcel Size: 421 acres

Associated Sites: JAAP-001, JAAP-004, JAAP-011, JAAP-0L2, JAAP-0L3, JAAP-GWM,

PBC, JAAP-001-R-01, JAAP-002-R-01, JAAP-004-R-01

Planned Transfer Date: 200809 Current Land Use: Ammunition Plant Future Land Use: Tallgrass Prairie Leases/Permits/Licenses: None

Transfer Strategy: Transfer to another Federal Agency

Recipient: USDA Forest Service

Other Issues Affecting Transfer: Sites require remediation prior to transfer.

Parcel Name: Previously Transferred Land

Parcel Size: 15,080 acres

Associated Sites: JAAP-003-R-01

Transfer Date: 1997

Current Land Use: Tallgrass Prairie Leases/Permits/Licenses: None

Transfer Strategy: Federal to Federal Government

Recipient: USDA Forest Service
Other Issues Affecting Transfer: NA

JOLIET ARMY AMMUNITION PLANT

Installation Restoration Program

Total AEDB-R IRP Sites / AEDB-R sites with Response Complete: 55/39

Different Site Types:

6 Burn Areas 2 Contaminated Buildings 1 Contaminated Fill
1 Contaminated Groundwater 1 Contaminated Sediments 1 Contaminated Soil
5 Disposal Pits/Dry Well 1 Firing Range 1 Industrial Discharge

6 Landfills 2 Maintenance Yards 14 Spill Sites

8 Storage Areas 1 Surface Disposal Area

2 Surface Impoundments/Lagoon 1 Unexploded Munitions/Ordnance

2 Waste Treatment Plants

Most Widespread Contaminants of Concern: Explosives, Metals, MEC

Media of Concern: Soil, Groundwater

Completed Removal (REM)/Interim Remedial Action (IRA)/Remedial Action (RA):

1984 IRA - Red Water Lagoon

1985 IRA - Ash Pile Caps (2)

1989-1994 RA - UST removals

1993 IRA - Ash Pile Cap Repairs

1996 REM - PCB Waste Oil Pits and associated UXO removal (L2)

IRA - Install Geo-membrane (SA1)

REM - PCB Electric Switch Boxes

IRA - Fence IRP UXO Areas (L2, L3)

1997 RA - Group 70 Motor Pool (L6)

1999 IRA - Ash Pile Cap Replacement (M1)

IRA - Ash Pile Leachate Control System (M9)

RA - GW monitoring well closure (update sites)

Bioremediation facility construction completed

2000 Tetryl Production Area (M5) Soil Excavation completed

L1, L7, L8, L9, L10, L17, L17 PCB-contaminated soil excavated & disposal

2001 RA - Red Water Area (M7)

2002 RA - Test Site (L11)

RA - Group 6 (L16)

2003 RA – Toluene Tank Farm (M10)

2005 RA – TNT Area (M6)

2006 RA - L1, L4, L7, L8, L10, L14, M9

Total IRP Funding

Prior years (up to FY05): \$ 88,427,000
Current year funding (FY06): \$ 10,110,247
Future Requirements (FY07+): \$ 12,802,000
Total: \$111,339,247



Duration of IRP

Year of IRP Inception: 1988 Year of IRP RC: 2012

Year of IRP Completion including Long-Term Management (LTM): 2037

IRP Contamination Assessment

IRP Contamination Assessment Overview

The main concerns of the IRP have been contamination of soils and groundwater by explosives and metals. There has been no migration of contamination off-post. Contaminants at the installation include waste products from the production of sulfuric and nitric acids, sodium sulfite, TNT, DNT, tetryl, RDX, metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs).

The goal of the overall cleanup activities at JOAAP is to eliminate or reduce the levels of contaminants to concentrations that are protective to human health and the environment, such that no unacceptable health effects or ecological impacts will result from future uses of the JOAAP property.

It is generally agreed that the JOAAP IRP began at the time of the Installation Assessment of Joliet Army Ammunition Plant (a records search conducted in 1978) to identify past contamination and to assess the potential for contaminant migration beyond the installation boundary, if any.

The Mfg Area was placed on the National Priorities List (NPL) in July 1987 with a Hazard Ranking Score (HRS) of 32.08. The LAP Area was placed on the NPL in March 1989 with a HRS of 35.23. The Army, EPA Region V, and Illinois EPA signed a Federal Facility Agreement in June 1989.

Of the 53 sites originally identified for study in the early investigations, 27 were recommended for remedial action in the Feasibility Study (FS) completed in late 1997. The other 26 were found to meet the requirements that allowed them to be recommended for no further action. Currently, 10 sites are active in the cleanup program, 3 sites have Remedy in Place (RIP) with Long Term Monitoring (LTM), and 14 sites are Response Complete (RC).

The Record of Decision (ROD) was finalized in November 1998 except for certain soil issues on USDA land. The ROD specifies remedial activities such as bioremediation, waste removal, source removal, and capping for contaminated soils. The ROD specified natural attenuation with institutional controls for groundwater because some contaminant concentrations exceed safe levels.

The current focus of the IRP is completing remedial action at sites for which final cleanup goals have been established. A subsequent Final ROD, 2004, addresses the interim USDA soil component. All other decisions within this document are considered final.

Based upon concerns raised by USDA and other stakeholders, the Army, EPA and Illinois EPA agreed in 1998, to reevaluate the risk to human and ecological receptors. Multiagency work groups were formed in 1999 to evaluate these risks, and recommended preliminary remediation goals in 2000. These goals were evaluated by a multi-agency management group.

IRP Contamination Assessment

Appropriate final remedial actions for USDA soils were developed, evaluated and selected in accordance with the NCP. This process was completed in FY04.

Very careful selection of appropriate final goals was critical because of the significant impacts they may have on final program schedule and costs.

IRP Cleanup Exit Strategy

11 sites remain to be remediated before they can be transferred. LTM will continue at sites where required.

1978

Installation Assessment, Sep

1982

Installation Restoration Survey, Nov

1983

- JAAP Phase II Technical Report: TNT Ditch Complex, Red Water Area, Explosive Burning Grounds, Group 61; Aug
- JAAP Phase II: Technical Report, Excessing Parcels, Aug

1985

JAAP Red Water Lagoon Sampling and Analysis, Remedial Action, Oct

1986

- Midwest Site Confirmatory Survey, Sampling Report, Round 1, Aug
- Midwest Site Confirmatory Survey, Sampling Report, Round 2, Sep.
- Midwest Site Confirmatory Survey Assessment Report, Nov

1989

Assessment Report, PCB Spill Area, Group 70, LAP Area, Feb

1990

• Phase I Results Report, Remedial Investigation, Manufacturing Area, Sep.

1993

- Phase II Remedial Investigation Report, Manufacturing Area, May
- Phase I Remedial Investigation Results Report, LAP Area, Jul

1994

- Baseline Risk Assessment (Final), RI/FS, Manufacturing Area; Mar
- Health Risk Assessment for Consumption of Deer Muscle and Liver from JAAP, (Final), Jun
- Feasibility Study, Groundwater Operable Unit, Manufacturing Area, Oct
- Phase I Ecological Risk Assessment (Final), Nov
- Phase II Aquatic Ecological Risk Assessment (Draft), Nov
- Phase II Remedial Investigation (Final), LAP Area, Nov

1995

- Feasibility Study, Groundwater Operable Unit, LAP Area, Jan
- Baseline Risk Assessment (Final), RI/FS, LAP Area, Feb
- Waste Classification and Volume Estimates, LAP Area (Revised Draft), Apr

1996

- JAAP Preliminary Remediation Goals, Apr
- Internal Draft Feasibility Studies (4), Oct

1997

- Phase 2, Aquatic Ecological Risk Assessment, Jan
- Project Management Plan for the Environmental Removal Action, L6/Group 70, Aug
- Final Feasibility Study Report, LAP Area, Soil Operable Units and Groundwater Operable Units, Sep
- Final Feasibility Study Report, Mfg Area, Soil Operable Units and Groundwater Operable Units, Sep
- Proposed Plans for the Groundwater Operable Unit and the Soil Operable Unit for JOAAP, Dec

1998

 Record of Decision, Soil and Groundwater Operable Units, Manufacturing and Load-Assembly-Package Areas, Nov

1999

- Draft Final RD/RA Work Plan, Montgomery Watson, Feb
- Final RD/RA Work Plan for Groundwater and Soil, Dec

2000

- Prairie Worker and Ecological PRG Reports, Sep
- Final Closure Report Site M5, Sep

2001

- Draft Final PCB Sites RA Closure Report, Sep
- Final Ordnance Removal and Site Characterization, Sep.
- Draft Treated Soil Re-Use Plan, Nov

2002

Draft Final Site M10 Closure Report, Jan

2003

- Draft Final Sites L11/L16 Closure Report, Aug
- Draft Final Site M7 Closure Report, Sep
- Draft Focused Feasibility Study, Oct
- Draft Final Focused Feasibility Study, Nov

Previous Studies

2004

- Final Feasibility Study, Feb
- Proposed Plan for the Soil Operable Unit, Interim Sites, Mar
- 5-Year Review, Soil & GW, Apr
- Final Record of Decision for SOU, Interim Sites, Jun

2005

- Draft Final Closure Report Site M6, Dec
- Final RD/RA Work Plan, Interim Sites, Oct
- Final Project Management Plan, PBC, Jun
- Final Quality Control Plan, PBC, Aug
- Final Accident Prevention Plan, PBC, Aug
- Final LTM/LTO Plan, PBC, Sep
- Final Site M9 Workplan, Sep
- Draft Final landfill O&M Plan, Jun
- Final Site L4 Workplan, Nov

2006

- Draft Closure Report, Sites L1, L7, L8, L10 and L14, Mar
- Draft MEC Workplan, Jan
- Draft Explosive Safety Submission, Jan
- Final Closure Report Site M6, Jun

JOLIET ARMY AMMUNITION PLANT

Installation Restoration Program
Site Descriptions

JAAP-001 SOUTHERN ASH PILE (M1)

SITE DESCRIPTION

The Southern Ash Pile site is encompassed within a fenced area of approximately 50 acres, though the pile itself covers about eight acres. This is in the southwestern corner of the Manufacturing Area. The pile contains the solid residue from the incineration of red water and is comprised primarily of inorganic salts, mostly sodium sulfate. The pile was completed and initially capped in 1976. The cap has been repaired twice due to settling which caused breaching of the cap. A flexible membrane cap was installed in 1996, and then replaced in 1999.

Both groundwater and surface water have been impacted by past discharges. A Groundwater Management Zone (GMZ) has been established and was revised in FY03.

This site is part of Soil Remediation Unit (SRU) 6 for landfills.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:

Sulfate

MEDIA OF CONCERN: Soil,

Groundwater

<u>Phases</u>	Start	<u>End</u>
PA	. 198711	198803
SI	. 198712	198803
RI/FS	. 199001	199710
RD	. 199806	199906
IRA	. 198711	199704
RA(C)	199904	200709

RC DATE: 200710

Part of PBC

This site is intended to be transferred to the USDA.

CLEANUP STRATEGY

The landfill contents (approximately 205K cy) will be excavated and disposed at the WCLF or other off-site disposal facility. Groundwater monitoring will continue in support of the selected remedy until remedial goals are met. These costs are being funded under site PBC at Joliet through 2012. LTM costs will be captured under JAAP-GWM after 2012.

JAAP-002 EXPLOSIVE BURNING GROUNDS (M2)

SITE DESCRIPTION

The Burning Ground is a 25 acre site in the southwestern portion of the Mfg. Area. TNT has been detected in soil, but not groundwater.

This is a 2004 ROD site and final remedial goals have been established.

This site is intended to be transferred to the USDA.

CLEANUP STRATEGY

Approximately 6.3K cy of explosives contaminated soil will be excavated and bioremediated in FY06. Funding for the treatment will be allocated to the Bioremediation Facility located at JAAP-004 (M4).

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives (TNT)

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
RD	199806	200506
RA(C)	200410	200610

RC DATE: 200610

JAAP-003 FLASHING GROUNDS (M3)

SITE DESCRIPTION

The Flashing Ground is six-acre fenced area, within a 60-acre parcel located in the west-central portion of the Manufacturing Area. It was used primarily for the flash burning of equipment and demolition of materials to remove explosive residues.

The site contains approximately 5,600cy of metals-contaminated soil and 400cy of explosives-contaminated soil.

This is a 2004 Record of Decision (ROD) site and final remedial goals have been established.

This site is intended to be transferred to the USDA.

Groundwater monitoring has been temporarily ceased pending completion of the remedial action, since the results of four groundwater sampling rounds were below remedial goals.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, Metals

MEDIA OF CONCERN:

Soil

<u>Phases</u>	Start	End
PA	198711	.198803
SI	198711	.198803
RI/FS	199001	.200312
RD	199806	.200506
RA(C)	200505	.200612

RC DATE: 200706

CLEANUP STRATEGY

Contaminated soil will be excavated (6,000 cy), stabilized and disposed of in an approved landfill in FY07. Groundwater monitoring costs are being funded under site PBC at Joliet through 2012.

JAAP-004 LEAD AZIDE AREA (M4)

SITE DESCRIPTION

JAAP-004 is approximately 100 acres in the west-central portion of the Mfg. Area. It was the site of lead azide explosives production. The buildings have been removed from the site. The lead contamination exists in a former two acre pond.

The central bioremediation treatment facility was constructed in 1999 and is located on a 20 acre parcel of this site.

This is 2004 ROD site and final remedial goals have been established.

This site is intended to be transferred to the USDA.

An installation wide five year review was funded under this site and completed in FY04.

Treatment is underway. At the end of FY05, over 200K tons of explosive-contaminated soil have been treated.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Lead

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	198711	.198803
SI	198711	.198803
RI/FS	199001	.200312
RD	199806	.200506
RA(C)	200006	.200709
RA(O)	200009	<mark>.200709</mark>

RIP DATE: 200709 RC DATE: 200709

CLEANUP STRATEGY

Approximately 4,200cy of lead-contaminated soil will be stabilized, excavated, and disposed of in an approved landfill.

Explosives-contaminated soils at the following AEDB-R sites have been or will be treated under this site: JAAP-002, 005, 006, 007, 0L1, 0L2, 0L3, 0L5, 0L7, 0L8, 0L9, L10, L14, and L16. Treatment costs for all explosives- contaminated soils (installation-wide) are allocated to this AEDBR site. Approximately 284,000 tons of contaminated soil is expected to be treated.

JAAP-009 NORTHERN ASH PILE (M9)

SITE DESCRIPTION

The Northern Ash Pile is approximately six acres in the north end of the Mfg. Area. The contents are very similar to the Southern Ash Pile (JAAP-001), but this area was first capped in 1968.

As a result of erosion, the site was recapped in 1985 with an additional 12 inches of clay and six inches of topsoil. The cap was repaired in 1993 and a leachate control system was installed in 1999. In 2001, as part of a maintenance action, the cap drainage was improved by increasing grade (mixture of clay and treated soil from the biotreatment facility).

This site is intended to be transferred to the State of Illinois.

It is part of SRU6 (landfills).

In early 2006, the site was excavated (55K cy), disposed at WCLF (Prairie View) and re-graded using bio-treated soils.

CLEANUP STRATEGY

REGULATORY DRIVER: CERCLA

STATUS

RRSE: Low

CONTAMINANTS OF CONCERN:

Sulfate

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	. 198711	.198803
SI	. 198711	.198803
RI/FS	. 198803	.199710
RD	. 199806	.199907
IRA	. 198711	.199311
RA(C)	. 199904	.200709

RC DATE: 200709

Part of PBC

Prepare the completion report and submit for regulatory approval.

JAAP-011 M11 LANDFILL (M11)

SITE DESCRIPTION

The original study site covered 100 acres in the southwestern portion of the Mfg. Area. The area was originally mined for gravel, later received a variety of wastes. The Landfill Area is approximately 20 acres. It contains mostly construction debris and was used from 1952-78. Groundwater contamination was not detected during RI sampling.

The consolidation of site debris will result in capping 11 acres of the site. It is part of SRU6 (landfills).

This site is intended to be transferred to the USDA.

CLEANUP STRATEGY

Consolidation of the waste and construction of a RCRA Subtitle C cap will be performed. Long term post-closure cap maintenance will be performed under the PBC until 2012.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN: Soil,

Groundwater

<u>Phases</u>	Start	<u>End</u>
PA	. 198711	198803
SI	. 198711	198803
RI/FS	. 198803	199710
RD	. 199806	199906
IRA	. 198711	199311
RA(C)	. 200409	200 <mark>709</mark>
I TM	201210	203909

RC DATE: 200709

Part of PBC

LTM, including groundwater monitoring and cap maintenance, beyond 2012 will be funded under sites JAAP-011.

JAAP-012 SELLITE MANUFACTURING AREA (M12)

SITE DESCRIPTION

This area is 16 acres in the northwest corner of the Mfg. Area. Sellite was used to purify TNT. Lead contaminated soil has been detected in this area.

This site is intended to be transferred to the USDA.

This is 2004 ROD site and final remedial goals have been established.

CLEANUP STRATEGY

Approximately 3,700cy of lead contaminated soil will be excavated and transported to an appropriate disposal site.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
RD	199806	200506
RA(C)	200504	200706

RC DATE: 200706

JAAP-013 M13 GRAVEL/EXCAVATION PITS (M13)

SITE DESCRIPTION

This area contains four pits that were originally mined for gravel. The unused pits received various disposals later. The area totals 130 acres in the central portion of the Mfg. Area. Thirteen acres will require a RCRA Subtitle D cap. The soil is contaminated with metals and SVOCs.

It is part of SRU6 (landfills).

The acreage outside of the landfill area was transferred to the State of Illinois in August 2000. The 13 acre landfill area will be transferred to the State of Illinois after remediation is completed.

A Groundwater Management Zone (GMZ) has been established.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:

SVOCs, Metals

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	198711	.198803
SI	198711	.198803
RI/FS	198803	. 199710
RD	199806	. 199906
RA(C)	200409	.200709
I TM	201210	203909

RC DATE: 200709

Part of PBC

CLEANUP STRATEGY

A RCRA Subtitle D cap will be constructed. Long term post-closure cap maintenance will be performed under the PBC until 2012.

LTM, including groundwater monitoring and cap maintenance, beyond 2012 will be funded under sites JAAP-013.

JAAP-0L1 GROUP 61 TNT - RIDGE & FURROW SYSTEM (L1)

SITE DESCRIPTION

Group 61 is a demilitarization process area that covers 80 acres in the north central portion of the LAP Area and is part of SRU1 for explosives-contaminated soil. The site contains the Ridge-and-Furrow System, where ammunition washout effluent was allowed to evaporate.

This site is intended to be transferred to the USDA.

PCB-contaminated soil (155cy) was removed in August 1999.

This is a 2004 ROD site for contaminated soil and final remedial goals have been established.

A Groundwater Management Zone (GMZ) has been established.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, TPH

MEDIA OF CONCERN: Soil,

Groundwater

<u>Phases</u>	Start	<u>End</u>
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
RD	199806	200506
RA(C)	199908	200606

RC DATE: 200606

In FY06, approximately 12K cy of explosives-contaminated soils was excavated and transported to JAAP-004 for treatment. Approximately 1,900 cy of TPH-contaminated soils was excavated and transported to JAAP-004 for treatment.

CLEANUP STRATEGY

Groundwater monitoring will continue in support of the selected remedy until remedial goals are met. These costs are being funded under site PBC at Joliet through 2012. LTM costs will be captured under JAAP-GWM after 2012.

JAAP-0L2 EXPLOSIVE BURNING GROUND (L2)

SITE DESCRIPTION

This site is 45 acres in the west central portion of the LAP Area. It was used for the open combustion of munitions and explosive wastes. It also contained popping furnaces and oil disposal pits. Soils containing metals near popping furnaces are part of SRU2. Soils around burning pads with explosives and metals are part of SRU3. MEC is present.

A GMZ has been established.

This is a 2004 ROD site and final remedial goals have been established for soils.

This site is intended to be transferred to the USDA.

Beginning in FY06, approximately 4400 cy of metals and explosives contaminated soils will be excavated and disposed in an approved landfill.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, Metals, MEC

MEDIA OF CONCERN: Soil,

Groundwater

<u>Phases</u>	Start	<u>End</u>
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
IRA	199606	199702
RD	199806	200506
RA(C)	200504	200706

RC DATE: 200706

An additional 20,000 cy of soils contaminated with explosives and MEC will be excavated and treated or disposed. These volumes have been reevaluated for accuracy.

CLEANUP STRATEGY

The excavation costs are impacted by the presence of MEC at the site.

Groundwater monitoring will continue in support of the selected remedy until remedial goals are met. These costs are being funded under site PBC at Joliet through 2012. LTM costs will be captured under JAAP-GWM after 2012.

JAAP-0L3 DEMO AREA (L3)

SITE DESCRIPTION

This site is 50 acres in the west central portion of the LAP Area. It was used for open combustion of refuse and contained a fire training site. The fire training area and soils east of demolition pits have metals (SRU2). Areas within the berms have metals and explosives (SRU3). Berm soil will be capped as part of SRU6. MEC is present. In 1997, the site was fenced as part of an IRA. A GMZ has been established.

This is a 1998 and 2004 ROD site and final remedial goals have been established for soils. This site is intended to be transferred to the USDA.

CLEANUP STRATEGY

Approximately 757cy of metals-contaminated soils will be excavated and disposed.

An additional 111cy of soils contaminated with

both explosives and metals will be excavated and disposed. These volumes have been reevaluated for accuracy. Both removals will be completed as part of the IRA phase.

Approximately 7.5 acres will be capped under the RA(C) phase. Cap maintenance will be required.

Groundwater monitoring will continue in support of the selected remedy until remedial goals are met. These costs are being funded under site PBC at Joliet through 2012. LTM costs will be captured under JAAP-GWM after 2012.

The costs are impacted by the presence of MEC at the site.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, Metals, MEC

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	<u>End</u>
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
IRA	199610	200709
RD	199806	200506
RA(C)	200410	200709

RC DATE: 200709

JAAP-0L4 L4 LANDFILL AREA (L4)

SITE DESCRIPTION

The landfill is two acres in the west central portion of the LAP Area. It was reportedly filled with early construction wastes. It is part of SRU6 (landfills).

This site is intended to be transferred to the USDA.

In FY06, approximately 18.4K cy was excavated and transported to WCLF.

CLEANUP STRATEGY

Prepare and submit closure reports to the regulatory agencies for approval.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	. 198711	198803
SI	. 198711	198803
RI/FS	. 198803	199710
RD	. 199806	199906
RA(C)	. 200409	200709

RC DATE: 200709

Part of PBC

JAAP-0L5 SALVAGE YARD (L5)

SITE DESCRIPTION

This site is approximately 16 acres in the northwestern portion of the LAP Area. It was used for open storage and salvage of miscellaneous installation materials. Metals, PCBs and TPH were detected in the soil above action levels.

This is a 1998 and 2004 ROD site and final remedial goals have been established for soils.

The 1998 ROD covers the PCB contaminated soil and the 2004 ROD covers the metals and TPH contaminated soil.

This site is intended to be transferred to the USDA.

In FY06, approximately 200cy of TPH-contaminated soil was excavated and transported to JAAP-004 for treatment.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Metals, TPH, PCBs

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	198711	198803
SI	198711	198803
RI/FS	199001	200308
RD	200101	200506
RA(C)	200410	200706

RC DATE: 200706

Beginning in FY06, approximately 2,165cy of metals and PCB contaminated soil will be excavated and transported to WCLF or other off-site disposal facility.

CLEANUP STRATEGY

Prepare and submit closure reports to regulatory agencies for approval.

JAAP-0L7, 0L8, L10 GROUP 1 (L7), GROUP 2 (L8), GROUP 3A(L10)

SITE DESCRIPTION

These Groups (1, 2, 3A) are located in the eastern portion of the LAP Area and cover about 100 acres each. They were used to load, assemble and pack munitions such as bombs, shells, and mines.

PCB-contaminated soil was excavated in 1999 under the 1998 ROD.

These sites are intended to be transferred to the USDA.

They are also 2004 ROD sites and final remedial goals have been established for explosives.

In FY06, **JAAP-0L7:** approximately 3,860cy of explosives-contaminated soil was excavated and transported to JAAP-004 for treatment.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, PCBs

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
RD	199806	200506
RA(C)	199908	200606

RC DATE: 200606

In FY06, **JAAP-0L8:** approximately 1,869cy of explosives-contaminated soil was excavated and transported to JAAP-004 for treatment.

In FY06, **JAAP-L10**: approximately 2,952cy of explosives-contaminated soil was excavated and transported to JAAP-004 for treatment.

CLEANUP STRATEGY

Prepare and submit closure reports to regulatory agencies for approval.

SITE DESCRIPTION

Group 3 is located in the eastern portion of the LAP Area and covers about 100 acres. It was used to load, assemble and pack munitions such as bombs, shells, and mines.

PCB-contaminated soil was excavated in 1999 under the 1998 ROD.

This site is intended to be transferred to the USDA.

This is a 2004 ROD site and final remedial goals have been established for explosives.

Beginning in FY06, approximately 4,000 cy of explosives-contaminated soil will be excavated and transported to JAAP-004 for treatment.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, PCBs

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	198711	198803
SI	198711	198803
RI/FS	199001	200312
RD	199806	200506
RA(C)	199908	200608

RC DATE: 200608

CLEANUP STRATEGY

Prepare and submit closure reports to regulatory agencies for approval.

JAAP-L14 **GROUP 4 FUZE PRODUCTION/SMOKELESS POWDER**

SITE DESCRIPTION

This site is in the southwestern portion of the LAP Area and covers approximately 60 acres. This site was part of the Fuze and Booster Area.

This site is intended to be transferred to the USDA.

This site is a 2004 ROD site and final remedial goals have been established for soil.

In FY05, approximately 780cy of explosivescontaminated soil was excavated and transported to JAAP-004 for treatment.

CLEANUP STRATEGY

Groundwater monitoring will continue in support of the selected remedy until remedial goals are

A GMZ has been established.

CONTAMINANTS OF CONCERN:

STATUS

REGULATORY DRIVER: CERCLA

Explosives

RRSE: High

MEDIA OF CONCERN: Soil,

Groundwater

Phases Start End PA......198711......199803 SI......198711......199803 RI/FS 199001200312 RD199806200509 RA(C) 200410200606

RC DATE: 200606

met. These costs are being funded under site PBC at Joliet through 2012. LTM costs will be captured under JAAP-GWM after 2012.

JAAP-L23 DISPOSAL PIT AT GROUP 27

SITE DESCRIPTION

The site is in the northern portion of the LAP Area and occupies approximately 2 acres. A small disposal pit in the southwest corner of the investigated area requires metals-contaminated soils remediation.

This site is intended to be transferred to the USDA.

This is a 2004 ROD site and final remedial goals have been established.

Beginning in FY06, a small area on the southwest corner of L23 (a.k.a. L23A) requires excavation and disposal (at an approved landfill) of 3,300cy of metals-contaminated soils.

CLEANUP STRATEGY

Prepare and submit closure reports to regulatory agencies for approval.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Metals

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	. 198711	198803
SI	. 198711	198803
RI/FS	. 199011	200312
RD	. 199806	200509
RA(C)	. 200504	200706

RC DATE: 200706

JAAP-GWM INSTALLATION-WIDE GWATER MONITORING

SITE DESCRIPTION

This site was created to address all groundwater monitoring at Joliet AAP. Sites included are: JAAP-001, 003, 005, 006, 007, 008, 0L1, 0L2, 0L3, L14.

The groundwater activities currently include surveying 181 points, monitoring 110 wells and 18 surface water locations.

CLEANUP STRATEGY

Groundwater monitoring will continue. Installation wide five year reviews will be conducted, scheduled for FY09.

Wells not required for monitoring will be properly closed and abandoned.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:

Explosives, VOCs, Metals

MEDIA OF CONCERN:

Groundwater

<u>Phases</u>	Start	End
PA	198711	198803
SI	198711	.198803
RI/FS	199806	199906
RD	199906	199912
RA(C)	199906	199912
LTM	200001	203009

RC DATE: 199912

Part of PBC

PBC AT JOLIET

SITE DESCRIPTION

This site was created to address funding information for the Performance-Based Contract for JOAAP. The period of performance for this contract is 8 years beginning in 2005.

Sites JAAP-001, 009, 011, 013, 0L4, and GWM are covered under a PBC.

CLEANUP STRATEGY

See individual site description pages for details.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:

Metals, Explosives, TPH, PCBs,

VOCs, SVOCs

MEDIA OF CONCERN: Soil,

Groundwater

<u>Phases</u>	Start	End
PA	199307	200109
RA(C)	200409	201209
RA(O)	200409	201210

RC DATE: 201210

IRP No Further Action Sites Summary

AEDB-R#	Site Title	Documentation/Reason for NFA	NFA Date
JAAP-005	M5 – TETRYL	SITE M5 CLOSURE REPORT	199909
07 17 11 000	PRODUCTION AREA	STE MIS SESSORE REPORT	100000
JAAP-006	M6 – TNT DITCH	SITE M6 CLOSURE REPORT	200509
07 17 (1 000	COMPLEX	OTTE MO GEOGGIE REFORT	200000
JAAP-007	M7 – RED WATER AREA	SITE M7 CLOSURE REPORT	200112
07011 007	SOUTH OF THE DITCH	OTTE WIT GEOGRAFICE TREE ORT	200112
JAAP-008	ACID MANUFACTURING	FEASIBILITY STUDY	199412
374AI -000	AREA	LAGIBIETT GTODT	199412
JAAP-010	TOLUENE TANK FARMS	SITE M10 CLOSURE REPORT	199909
07011 010	(3)	OTTE WITO GEOGGINE NET OINT	133303
JAAP-014	FORMER POND AREA	BASELINE RISK ASSESSMENT	199305
JAAP-015	FORMER SEWAGE	PHASE 2 – REMDIAL	199305
07011 013	TREATMENT PLANT	INVESTIGATION	133303
JAAP-016	MOTOR POOL AREA	PHASE 2 - RI	199305
JAAP-017	LAUNDRY FACILITY	PHASE 2 – RI	199305
JAAP-018	HERBICIDE STORAGE	PHASE 2 - RI	199305
3AAI -010	AREA	THAGE 2 - IXI	199505
JAAP-0L6	GROUP 70 – MOTOR	REMOVAL ACTION REPORT	199711
JAAI -OLO	POOL	INEMOVAL ACTION NET ON	133711
JAAP-L11	TEST SITE	SITE L11/L16 CLOSURE REPORT	200212
JAAP-L12	DOYLE LAKE AREA	FEASIBILITY STUDY	199412
JAAP-L13	GROUP 68	BASELINE RISK ASSESSMENT	199412
JAAP-L15	GROUP 5	BASELINE RISK ASSESSMENT	199604
JAAP-L13	GROUP 6	SITES L11/L16 CLOSURE	200212
JAAF-L 10	GROUP 0	REPORT	200212
JAAP-L17	GROUP 7	PCB SITES CLOSURE REPORT	199912
JAAP-L18	GROUP 8	BASELINE RISK ASSESSMENT	199412
JAAP-L19	GROUP 9	FEASIBILITY STUDY	199604
JAAP-L20	GROUP 20	PHASE 1 - RI	199412
JAAP-L21	SANITARY LANDFILL	PHASE 1 - RI	199412
JAAP-L22	GROUP 25 RAILROAD	PHASE 1 - RI	199412
07 V (1 LZZ	CLASSIFICATION YARD	TH/OL I IXI	100412
JAAP-L24	GROUP 29	PHASE 1 - RI	199412
JAAP-L25	GROUP 62	PHASE 2 - RI	199412
JAAP-L26	GROUP 63	PHASE 2 - RI	199412
JAAP-L27	GROUP 64	PHASE 1 - RI	199412
JAAP-L28	GROUP 65	PHASE 1 - RI	199412
JAAP-L29	RCRA HASARDOUS	PHASE 1 - RI	199412
07V (1 L25	STORAGE (GROUP 66)	TH/OL I IXI	100412
JAAP-L30	GROUP 66A	PHASE 1 - RI	199412
JAAP-L31	EXTRACTION PITS	PHASE 1 - RI	199412
JAAP-L31	GROUP 60	BASELINE RISK ASSESSMENT	199510
JAAP-L33	PVC AREA	PHASE 1 - RI	199412
JAAP-L34	FORMER BURNING AREA	PHASE 1 - RI	199412
JAAP-L35	FILL AREA	PHASE 1 - RI	199412
טרעו -ריי			133712

Initiation of IRP: 1988

Past Phase Completion Milestones

1978

• IRP Installation Assessment, Sep.

1982

Installation Restoration Survey, Nov

1983

JAAP Phase II Technical Report, Aug

1985

• JAAP Red Water Lagoon Remedial Action, Oct

1986

- Midwest Site Confirmatory Survey, Round 1, Aug
- Midwest Site Confirmatory Survey, Round 2, Sep
- Midwest Site Confirmatory Survey Assessment, Nov

1987

Manufacturing Area NPL Listing, Jul

1989

- LAP Area NPL Listing, Apr
- Interagency Agreement (IAG) Signed, Jun

1990

Manufacturing Area Phase I RI, Sep

1993

- Manufacturing Area Phase II RI, May
- LAP Area Phase I RI, Jul

1994

• LAP Area Phase II RI, Dec

1996

Preliminary Remediation Goals, Apr

1997

- Feasibility Study All sites, Sep
- Proposed Plan All sites, Dec

1998

- Record of Decision, Nov
- Deadlines for Completion of Draft Primary Documents and Project Schedule, Dec

1999

- Remedial Action Start All final ROD sites, Apr
- RD/RA Final Work Plan All final ROD sites, Dec

2000

• Eco and Human Health PRGs established, Aug

2003

Multi-agency agreement reached, leading to ROD, Aug

2004

- Final Focused Feasibility Study, Feb
- Final ROD for Interim Sites, Jun

2005

Award Performance-based Contract for remaining IRP work, Mar

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates: NA

Projected Construction Completion Date of IRP: 2012

Projected Date for Removal from NPL: Unknown

Schedule for Next Five-Year Review: 2009

Estimated Completion Date of IRP (including LTM phase): 2037

Joliet AAP IRP Schedule

(based on required funding)

AEDB-R#	Phase	FY07	FY08	FY09	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
JAAP-002	RA(C)										
JAAP-003	RA(C)										
JAAP-004	RA(C)										
	RA(O)										
JAAP-011	LTM										203909
JAAP-012	RA(C)										
JAAP-013	LTM										203909
JAAP-0L2	RA(C)										
	RA(C)										
JAAP-0L3	RA(C)										
JAAP-GWM	RA(O)										203009
PBC at Joliet	RA(C)										
	RA(O)								·		



Prior Years Funds

Total Funding up to FY04: \$77,075K

FY 05 Prior Year Funds

Site Information	Expenditures	FY Total
RA(C), JAAP-002	\$142K	
RD, JAAP-002	\$1K	
RA(C), JAAP-003	\$388K	
RD, JAAP-003	\$1K	
RA(C), JAAP-004	\$573.7K	
RA(O), JAAP-004	\$6495.6K	
RD, JAAP-004	\$1K	
RA(C), JAAP-006	\$12.4K	
RA(O), JAAP-009	\$30K	
RD), JAAP-012	\$1K	
RA(C), JAAP-0L1	\$466.4K	
RD, JAAP-0L1	\$1K	
RD, JAAP-0L2	\$1K	
RA(C), JAAP-0L3	\$239.3K	
RD, JAAP-0L3	\$1K	
RA(C), JAAP-0L5	\$171.2K	
RD, JAAP-0L5	\$1K	
RA(C), JAAP-0L7	\$94.5K	
RD, JAAP-0L7	\$1K	
RA(C), JAAP-0L8	\$64K	
RD, JAAP-0L8	\$1K	
RA(C), JAAP-0L9	\$98.5K	
RD, JAAP-0L9	\$1K	
RA(C), JAAP-GWM	\$4.8K	
RA(C), JAAP-010	\$26.2K	
RD, JAAP-010	\$1K	
RA(C), JAAP-014	\$53.4K	
RA(C), JAAP-014	\$1K	
RA(C), JAAP-L23	\$1K	
RA(C), PBC	\$15,037K	_
RAB, TAPP	\$12.1K	\$23,922.9K

Total Prior Year Funds: \$100,997.9K

Current Year (FY06) Requirements

Site Information Expenditures FY Total 9,764.93K \$9,764.93K

Total Future Requirements: \$12,802.00

Total IR Program Cost (from inception to completion of the IRP): \$123,564.83K

JOLIET ARMY AMMUNITION PLANT

Military Munitions Response Program

MMRP Summary

Total AEDB-R MMRP Sites/AEDB-R sites with Response Complete: 4/1

AEDB-R Site Types

3 Burn Area 1 Small Arms Range

Most Widespread Contaminants of Concern: MEC/MC

Media of Concern: Soil

Completed REM/IRA/RA:

None

Total MMRP Funding

Prior years (up to FY05): \$ 472,520 Current Year (FY06): \$ 738,000 <u>Future Requirements (FY07+): \$ 0</u> Total: \$1,210,520

Duration of MMRP

Year of MMRP Inception: 2002

Year of MMRP RC: 2007

Year of MMRP Completion Including LTM: 2007

MMRP Contamination Assessment

MMRP Contamination Assessment Overview

The main concern of the MMRP program is to ensure that the lands are safe their intended public re-use. The 3 sites in the program are all designated for transfer to the US Forest Service to be in included in the Midewin National Tallgrass Prairie. As such, MEC clearance is required.

All three sites were associated with various OB/OD operations. Sites JAAP-001-R and 002-R are buffer areas around what were active OB/OD grounds. Site JAAP-004-R was a series of burning pads.

Description of Major MMRP Concerns

The concern at sites 1-R and 2-R is that burning operations within the active areas may have caused items to be scattered outwardly. This can occur if a munition "pops" during the burn, causing an adjacent item to become airborne. Ordnance scrap is known to exist in boundary areas. To date, no explosive ordnance items have been found.

The concern at 4-R stems from intact cases of non-metallic ordnance items being located there. Conventional ordnance detection practices may have failed to locate non-metallic items.

Responses to Date Addressing Major MMRP Concerns

All three sites have undergone and passed investigations that addressed the potential for soil or groundwater contamination.

The CTT Range inventory was completed in September 2002.

The Site Investigation was completed in May 2005. These three sites were recommended for remedial action.

A contract was awarded to complete the necessary responses and will be complete by September 2007.

MMRP Cleanup Exit Strategy

The installation has completed the SI phase (2005) and is currently executing follow on phases/actions as required in the individual site cleanup strategies. Completion of response actions by September 2007.

Previous Studies

2002

• Final CTT Range Inventory, Sep

2005

• Final SI, MMRP, May

JOLIET ARMY AMMUNITION PLANT

Military Munitions Response Program

Site Descriptions

JAAP-001-R-01 DEMOLITION AREA (L3)

SITE DESCRIPTION

This site is 34 acres, consisting of an approximate 200' band surrounding the Demolition Area site in the west central portion of the LAP area that was used from 1940 to 1975. The area is of concern because of the possibility of "kick out" from demo operations.

The demolition area was used for open burning (OB) of combustible refuse and munitions crates and was also the location of a fire training area consisting of less than 1 acre.

During the Ordnance Removal and Site Characterization Study one half of a BLU-26/B munition was discovered. Thirty other UXO items were also discovered during the study ranging from 40mm rifle grenades, M-T83 PD fuzes,

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: Low Risk

CONTAMINANTS OF CONCERN:

MEC

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	200304	200305
SI	200309	200505
RA(C)	200510	200709

RC DATE: 200709

Part of PBC

57mm projectiles, 155mm projectiles, and 105mm projectiles. The site characterization was not completed, so there is a possibility that more UXO are present at this site. This MMRP site surrounds the site identified under the AEDB-R program as JAAP-L3 and is currently undeveloped.

This site is scheduled to transfer to the USDA.

Site work is scheduled to begin in FY06.

CLEANUP STRATEGY

The property will be appropriately screened prior to transfer to USDA.

JAAP-002-R-01 EXPLOSIVE BURNING GROUND 1 (L2)

SITE DESCRIPTION

This site is approximately 32 acres, consisting of an approximate 200' band surrounding the Explosive Burning Ground in the west central portion of the LAP Area and was used between 1940 and 1975. The area is of concern due to the possibility of "kick out" from the burning grounds.

This explosive burning ground was used for the open combustion of munitions and explosive wastes and also contained popping furnaces and oil disposal pits.

The operational area covers approximately 5 acres and consists of six pads, each approximately 1,000 feet long, on which

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: Low Risk

CONTAMINANTS: MEC

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	200304	200305
SI	200309	200505
RA(C)	200510	200709

RC DATE: 200709

Part of PBC

explosives and explosive waste were burned between 1965 and 1977. A triangular bermed area, which may have been used for burning, was located just south of the burning pads. Three popping furnaces, where small ammunition was detonated, were located at the southwest corner of the site. This site also contains three solvent and oil disposal pits that were used to burn waste oil.

The burning grounds were suspected of containing BLU-26/B sub-munitions, however only miscellaneous parts were located during the Ordnance Removal and Site Characterization Study. During the site characterization 92 additional UXO items were discovered ranging from M48 nose fuzes, M66 base fuzes, miscellaneous fuze boosters, and 75mm projectiles. The site characterization was not completed, so there is a possibility that more UXO are present at this site. Remediation has been completed on areas where PCBs were of concern.

This site is intended to transfer to the USDA.

Site work is scheduled to begin in FY06.

CLEANUP STRATEGY

The property will be appropriately screened prior to transfer to USDA.

JAAP-004-R-01 FORMER BURNING AREA (L34)

SITE DESCRIPTION

This site covers approximately 7 acres in the central portion of the LAP area. It was used to burn raw explosives and backfill materials. During the Ordnance Removal and Site Characterization Study ceramic items believed to be the bodies of nonmetallic mines containing explosive residues were located. During the study, no UXO was located; however, 15 related scrap items were located consisting of ceramic and glass M5 mines, and nose and base fuzes. Less than 10 percent of this site was cleared, so the possibility exists for UXO to still be present. This site is identified under the AEDB-R program as JAAP-L34 and required no further action relative to HTRW.

The site is scheduled to transfer to the USDA.

Site work is scheduled to begin in FY06.

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: Moderate Risk

CONTAMINANTS OF CONCERN:

MEC/MC

MEDIA OF CONCERN: Soil

<u>Phases</u>	Start	End
PA	. 200304	200305
SI	. 200309	200505
RA(C)	. 200510	200709

RC DATE: 200709

Part of PBC

CLEANUP STRATEGY

The property will be appropriately screened prior to transfer to USDA.

MMRP No Further Action Sites Summary

AEDB-R#	Site Title	Documentation/Reason for NFA	NFA Date
JAAP-003-R-	Training Area 7	SI recommended NFA.	200505
01			

MMRP Schedule

Initiation of MMRP: 2003

Past Phase Completion Milestones

2003

• PA, May

2005

•SI, May

Projected ROD/DD Approval Dates: NA

Projected Construction Completion: 2007

Schedule for Five Year Reviews: NA

Estimated Completion Date of MMRP including LTM: 2007

Joliet AAP MMRP Schedule

(based on required funding)

AEDB-R#	Phase	FY07	FY08	FY09	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
JAAP-001-R-01	RA(C)										
JAAP-002-R-01	RA(C)										
JAAP-004-R-01	RA(C)										

MMRP Costs

Prior Years Funds

Total Funding up to FY04: \$460,000

FY05 Prior Year Funds

Site InformationExpendituresFY TotalSI\$12,520\$12,520

Total Funding up to FY05: \$ 0K

Current Year Requirements

Year Site Information Expenditures FY Total

FY06 JAAP-001-R-01 \$ 190K

JAAP-002-R-01 \$ 244K

JAAP-004-R-01 \$ 304K **\$ 738,000**

Total Future Requirements: \$0K

Total MMR Program Cost (from inception to completion of the MMRP): \$1,210,520

,

Community Involvement

Community involvement was initiated with the Technical Review Committee (TRC) that began in July 1988, after the Manufacturing Area was placed on the NPL. The TRC was replaced with a Restoration Advisory Board (RAB) that began in December 1995 and met monthly until June 1999. The group now meets every other month.

The mission of the RAB is to represent the community by facilitating communications and coordination between the community and the appropriate government agencies in the environmental cleanup of the JOAAP; to critically review and comment on pertinent environmental cleanup documents; to make recommendations to the US Army and other appropriate governmental agencies regarding cleanup methods and priorities; and to encourage public participation in accomplishing these goals.

Past meeting activities have included several installation tours, media (radio, television, newspaper) open house, special training events, and guest speakers. Individual RAB members have participated in the first IAP workshop, Region V RAB forum, DERP workshops, public speaking engagements, and radio and newspaper interviews. In addition, local and regional newspapers cover the RAB meetings. The RAB Community Co-Chair generates annual reports which are distributed up to the chain of command to the Office of the Secretary of Defense. Several RAB members participated in ecological and human health workgroups formed to finalize interim ROD issues.